

# Amensolar 3-Phase Residential ESS

All In One Energy Storage System



LFP Battery, Stable and Safe  
Module, Pack, System, Triple Protection



Adjustable Power in Each Phase  
Support Diesel Generator Control(DI/DO)



Modular Design, Plug and Play  
Mobile APP Monitoring



Supporting 200% Oversized PV Power  
On&OFF Grid Parallel System



Battery Model		Amensolar POWER TOWER A5120 X 2	
Physical		Operation	
Battery Type	LFP (LiFeP04)	Charge/Discharge Current	100A
Weight	90KG	Max. Charge/Discharge Current	200A
Dimension (W x H x D)	540*800*240mm	Operating Temperature Range	0 to 55°C charging -20 to 55°C discharging
IP Protection	IP21	Cooling Type	Natural Cooling
Warranty	5 Years product warranty 10 Years performance warranty	Humidity	0~95% (No condensation)
Electrical		BMS	
Nominal Voltage	51.2V	Modules Connection	Max.8
Nominal Energy	10.24KWh	Capacity	200/400/600/800Ah
Depth of Discharge (DoD)	90%	Power Consumption	<2W
Operating Voltage Range	44.8 -56.5V	Communication	CAN & RS485
Cycle Life	≥6000	Certificate	IEC/EN 62619; UN38.3; UL1973

Model	AIO-H3-8.0	AIO-H3-10.0	AIO-H3-12.0
Hybrid Inverter Model	N3H-A8.0	N3H-A10.0	N3H-A12.0
<b>PV String Input</b>			
Max. Continuous PV Input Power	16000 W	20000 W	20000 W
Max. DC Voltage	1100 V		
Nominal Voltage	720 V		
MPPT Voltage Range	140-1000 V		
MPPT Voltage Range (Full Load)	380~850 V	420V-850V	480~850 V
Number of MPPT	2		
Strings Per MPPT	1		
Max. Input Current	2*15 A		
Max. Short-circuit Current	2*20 A		
<b>AC Output (Grid)</b>			
Nominal AC Output Power	8KW	10 KW	12 KW
Max. AC Apparent Power	8800 VA	11000 VA	13200 VA
Rated input/output voltage	3/N/PE, 230/400 V		
AC Grid Frequency Range	50/60 Hz ± 5Hz		
Nominal Output Current	11.6 A	14.5 A	17.4 A
Max. Output Current	12.8 A	16.0 A	19.2 A
Power Factor (cosCD)	0.8 Leading-0.8 Lagging		
<b>Battery Input</b>			
Battery Type	LFP (LiFeP04)		
Nominal Battery Voltage	51.2 V		
Charging Voltage Range	44-58 V		
Max. Charging Current	160 A		
Max. Discharging Current	160 A	200 A	
Battery Capacity	200/400/600/800 Ah		
<b>AC Output (Backup)</b>			
Nominal AC Output Power	7360 W	9200 W	
Max. AC Output Power	8000 VA	10000 VA	
Nominal Output Current	10.7 A	13.3 A	
Max. Output Current	11.6 A	14.5A	
Nominal Output Voltage	3/N/PE, 230/400 V		
Nominal Output Frequency	50/60 HZ		
<b>Efficiency</b>			
Max. PV Efficiency	97.60%		
Euro. PV Efficiency	97.00%		
Anti-islanding Protection	Yes		
Output Over Current Protection	Yes		
DC Reverse Polarity Protection	Yes		
String Fault Detection	Yes		
DC/AC Surge Protection	DC Type II; AC Type III		
Insulation Detection	Yes		
AC Short Circuit Protection	Yes		